

(22) Date de dépôt/Filing Date: 2000/08/28

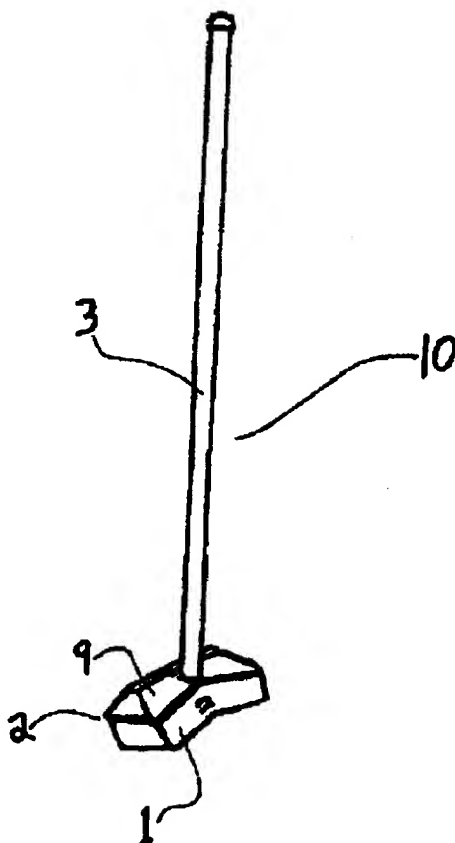
(41) Mise à la disp. pub./Open to Public Insp.: 2002/02/28

(51) Cl.Int.<sup>7</sup>/Int.Cl.<sup>7</sup> A63B 67/14

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(54) Titre : TETE DE BROSSE PERMETTANT DE FRISER LES CHEVEUX  
(54) Title: CURLING BRUSH HEAD



## ***DESCRIPTION OF CURLING BRUSH HEAD***

The invention is a brush head for a curling brush used in the sport of **curling**.

As a curling rock proceeds down a sheet of curling ice, the path in front of the rock often must be swept or brushed to keep the rock from slowing down too soon or curling (curving in it's path down the ice) too much. This is generally done with a special type of brush of which numerous types and styles exist. The brush heads currently available are generally rectangular in their ice contacting surface, but the running surface of the rock is round.

Previous brush heads have not generally addressed the shape of the surface of the brush head that contacts the ice. My invention does address this concern.

When a rock proceeds down the ice it does so in a generally straight line pattern with some bending to that line (the curl of the rock). If you divide the lengthwise path of the curling rock into three equal width sections (see drawing #2) and measure the respective ice contact area, called the running surface, of the rock in each section, you will find that the outer two sections each have approximately twice the surface contact area from the rock as the inner section. Due to the circular nature of the running surface of the rock, the rock path will have more of the rock running surface per unit width of the path contacting it as you move from the middle of the path toward the outside. This is true for the entire length of the rock's travel and demands that the outer sections receive more brushing attention than the inner section for the full potential of the curling rock to be exploited.

Conventional brush heads do not address this fact. Most are rectangular, some tapered at their ends giving less contact area to the outside sections.

The solution to this problem is a brush head body portion with an ice contact area

shaped somewhat in the form of a bow-tie, or hourglass (see drawings #1, #2, #4, and #5). Dividing the ice contact area of the brush head into three sections, the outer sections, the two wider portions of the hourglass shape, of the ice contact area of the brush head have approximately twice the ice surface contact area than the inner section leaving more brush contact area with the ice in the outer two sections of the rock path than the inner section. The head of the brush would consist of two major parts: an ice contact body which contacts the ice for brushing of the ice surface, and the brush head support, which attaches to the brush handle and to the ice contact body portion. The ice contact body portion and the brush head support may be one integral piece or may be separate pieces which are attached to, and possibly removable from, each other. Other parts of the brush head, such as hardware and glues for attachment, also would preferably be used. The brush head support does not necessarily have to mirror the ice contact body by having a bow-tie or hourglass shape. The ice contact body is the only portion of the brush to touch the ice surface for the purpose of brushing or scrubbing the rock path. To utilize the potential of the invention the movement of brushing or scrubbing the ice generally perpendicular to the path of the rock would entail the brush move generally back and forth along it's length (see drawing #5) while also proceeding down the rock path.

The specific length and widths of the brush head are variable depending on the desire of the manufacturer and curlers as long as the general bow-tie or hourglass shape, giving a brushing area relative to the requirements of each section of the rock path, is retained.

The Bow-tie brush head is easily adaptable to most if not all curling brushes on the market, and can be manufactured for entirely new brushes or brush head replacement. Any material currently used for curling brush heads can be used for the manufacture of the Bow-tie brush head.

**BENEFITS:**

1. The major benefit of the invention is that the path of the rock receives the proper amounts of brushing in each of its sections, thereby being more relative to the amount of rock running surfaces that will travel over those sections of the path.
2. A secondary benefit derived from this shape of brush head is that the bulk of the brush head can get in closer to the rock, particularly the outer portions of the brush head.

**LIST OF DRAWINGS:**

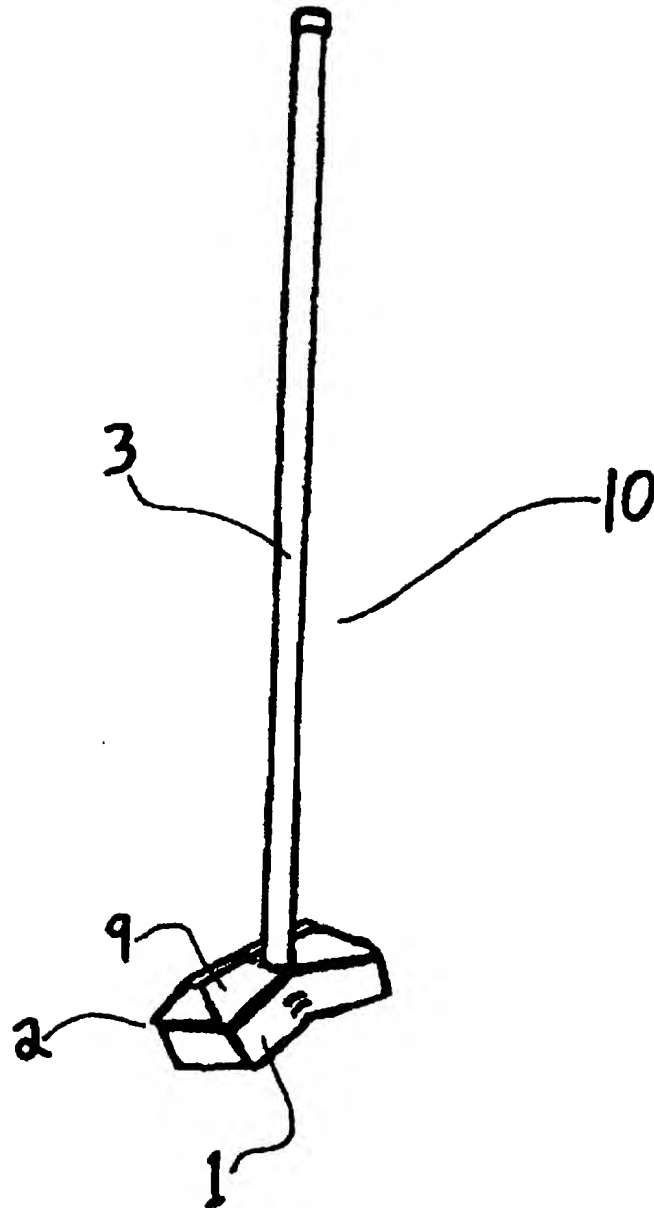
- #1. A curling brush with the bow-tie shaped brush head attached.
- #2. A second view of the invention showing the ice contact surface.
- #3. The path of a curling rock divided into three sections (defined by the four vertical broken lines), with the large circle representing the running surface (the area of the rock that actually contacts the ice) of a curling rock. Note the much larger surface contact area for sections 1 and 3 as opposed to section 2.
- #4. The general outline of the ice contact surface area of the ice contact body with the bow-tie or hourglass shape, displaying the three sections with the outer two sections approximately twice the surface area of the inner section.

- #5. Two additional general outlines of the ice contact surface area of the invention. Figure 1 with a more curved form, and figure 2 in more of a blocked form.
- #6. Shows the general brushing action of the bow-tie shaped brush in comparison with the general direction of travel of the curling rock. The drawing shows the ice contact body without the handle, brush head support, or any other part of the brush unit. The brushing motion will be back and forth across the path of the rock while the brush also proceeds down the path in front of the rock.

List of figures included in the drawings:

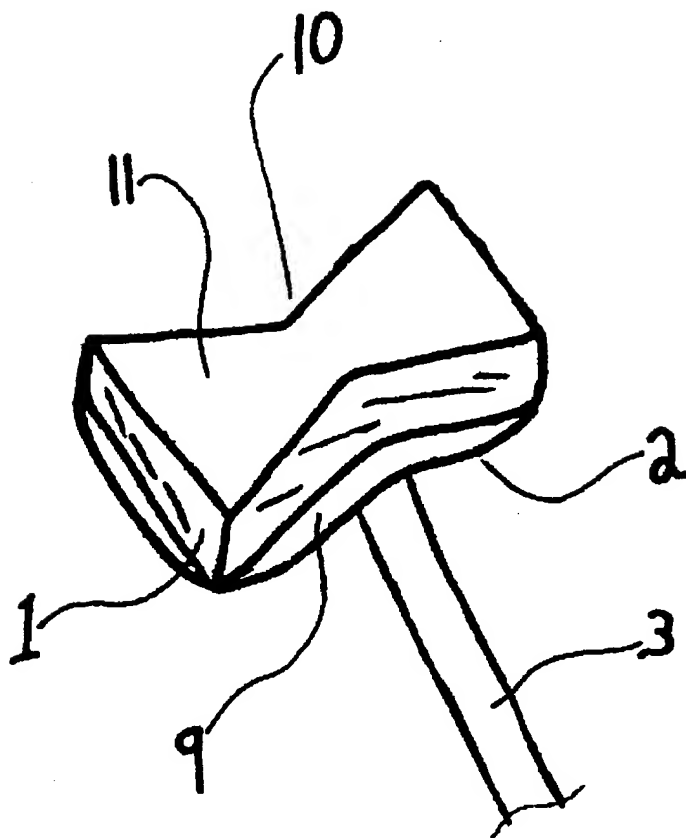
- #1. Ice contact body.
- #2. Brush head.
- #3. Brush handle.
- #4. Curling rock.
- #5. Section 1 of the rock path or brush head.
- #6. Section 2 of the rock path or brush head.
- #7. Section 3 of the rock path or brush head.
- #8. Ice contact or running surface of a curling rock.
- #9. Brush head support.
- #10. Curling brush.
- #11. Ice contact surface of the brush head.

DRAWING # 1.

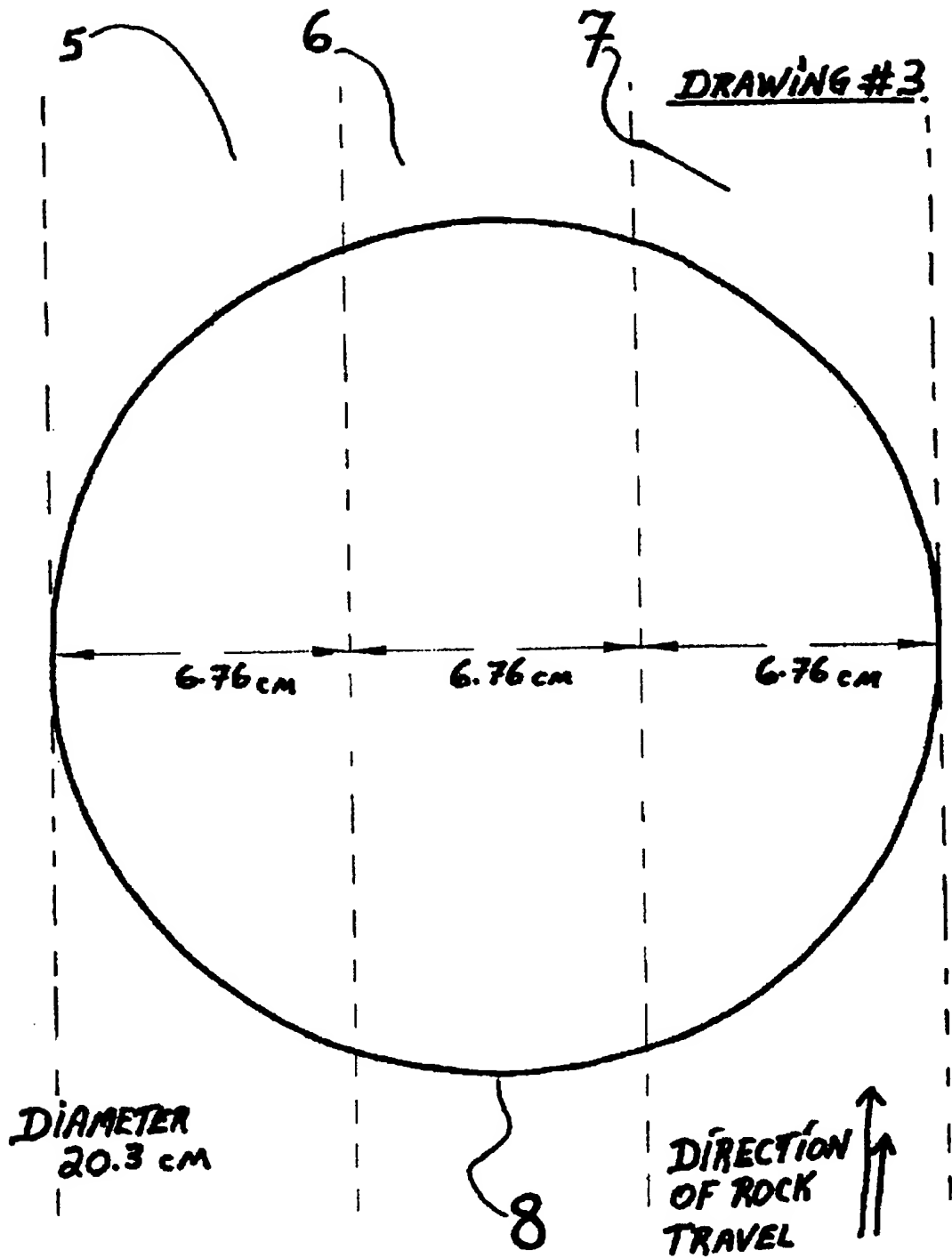


*Ravin Olson*

DRAWING # 2



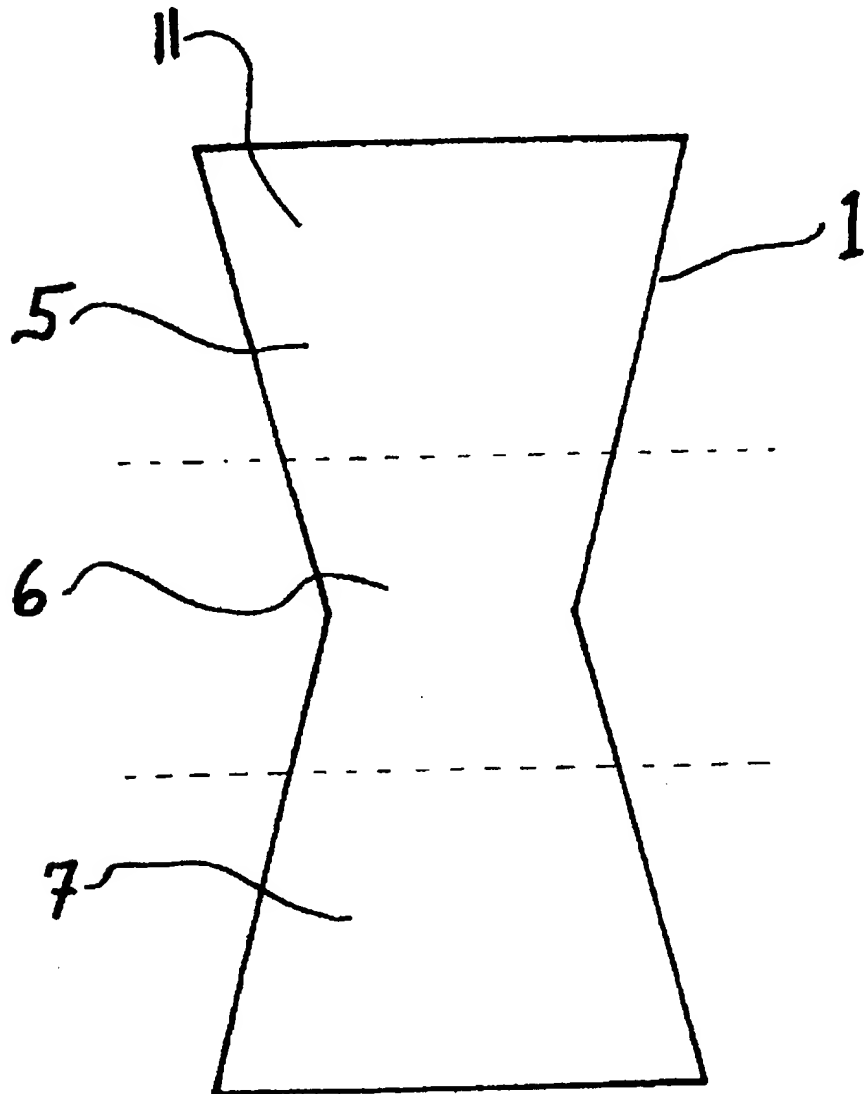
*Navin Olson*



David Olson



DRAWING # 4.



*David Oleson*

DRAWING # 5.

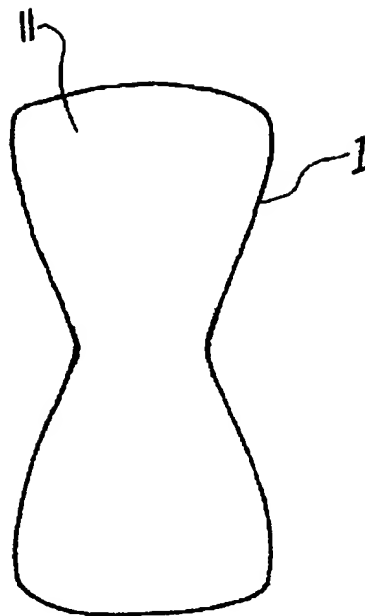


FIG. 1

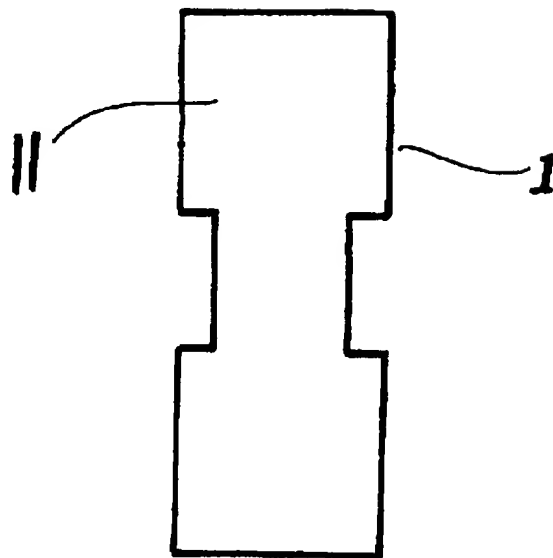
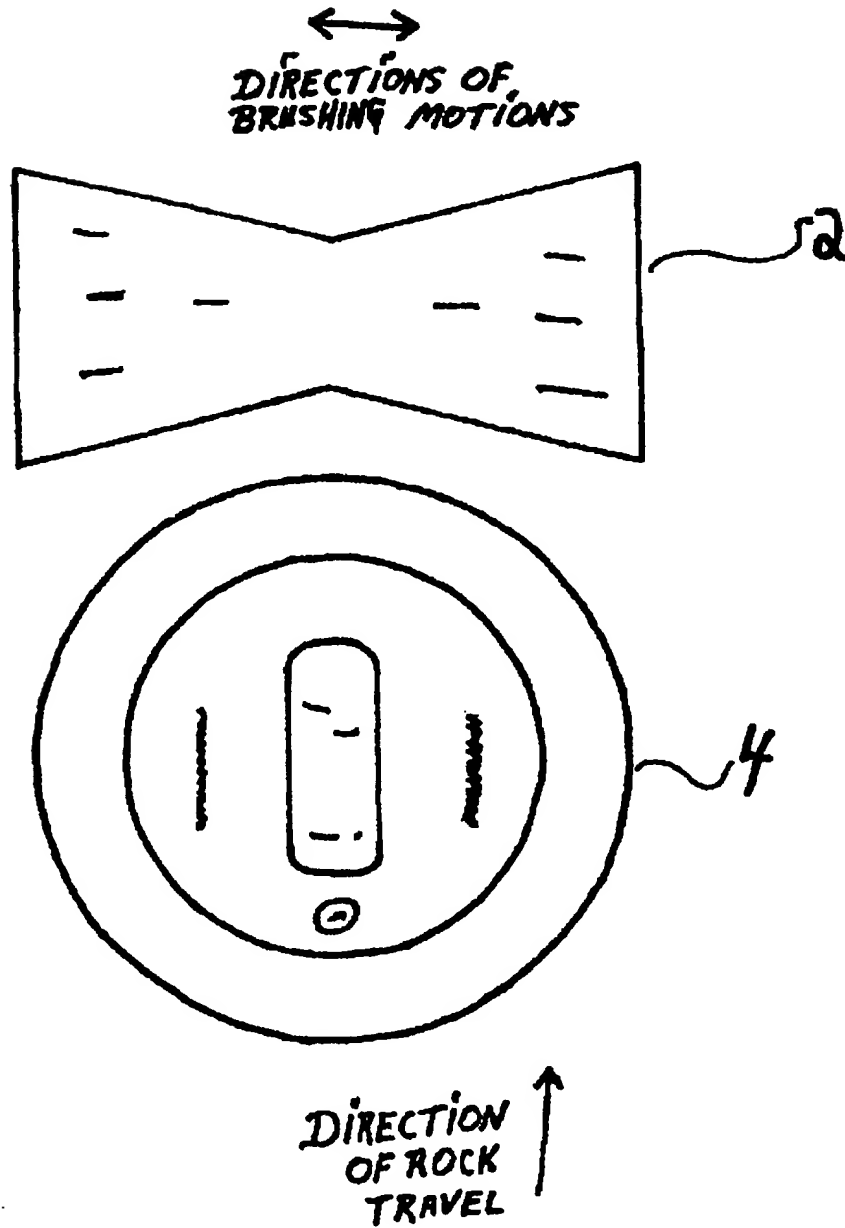


FIG. 2

Naivin Olson

DRAWING # 6.



*Darin Olson*